

## Fundamentals of Climatic Testing Seminar

### OBJECTIVES

Review of the different types of climatic tests and when and how to apply them. Tests include temperature, temperature shock, humidity, altitude, rain, solar, salt/fog, ice, dust/sand, and more.

### WHO SHOULD ATTEND

This course is intended for those involved in Environmental Testing that need to understand the specs for a variety of different industries, as well as how to set environmental test conditions for products that aren't governed by specifications.

### OUTLINE

#### Pretest documentation

- Test plan - differs from procedure - needed content - sample test plan
- Test procedure
- Why needed?
- Content - importance of each part
- How to write
- Outline of sample test procedure

#### Temperature testing

- Test requirements
- High temperature/Low Temperature
- Storage or non-operating
  - Source of test requirements
  - What test can reveal
- Operating
  - Source of test requirements
  - What test can reveal
- Appropriate operation during exposure to test environment; pitfalls
- Test equipment
  - Chambers - their heating, cooling and control
  - Instrumentation: sensors, readouts, recording
- Setting up for a typical test
- Preparing a typical test item to be tested
- Conducting the actual test
- Recording of data
- Data reduction

**Other Climatic Tests** - subtopics similar to temperature testing

- Temperature shock Testing
- Altitude testing
- Humidity testing
- Solar radiation testing
- Rain testing
- Immersion testing
- Icing/Freezing rain testing
- Fungus testing
- Salt fog testing
- Sand and Dust testing
- Explosive atmosphere testing

**Reporting on the test**

- Who will use the information?
- Content
- Format - presenting data